## MAY 2 2 7007 BO

## SEQUENCE LISTING

Aasly, Jan O Wszolek, Zbigniew K Farrer, Matthew J <120> Polynucleotide <130> U1913 <150> NO20045612 <151> 2004-12-23 <160> 2 <170> PatentIn version 3.1 <210> 1 <211> 2527 <212> PRT <213> Homo sapiens <220> <221> MISC FEATURE <222> (2019)..(2019) <223> X may be any amino acid except glycine. <300> <308> Genbank / AY792511 <309> 2004-11-15 (1)..(2527) <313> <400> 1 Met Ala Ser Gly Ser Cys Gln Gly Cys Glu Glu Asp Glu Glu Thr Leu Lys Lys Leu Ile Val Arg Leu Asn Asn Val Gln Glu Gly Lys Gln Ile 20 25 · Glu Thr Leu Val Gln Ile Leu Glu Asp Leu Leu Val Phe Thr Tyr Ser 35 40 Glu His Ala Ser Lys Leu Phe Gln Gly Lys Asn Ile His Val Pro Leu 50 Leu Ile Val Leu Asp Ser Tyr Met Arg Val Ala Ser Val Gln Gln Val 65 70 80 Gly Trp Ser Leu Leu Cys Lys Leu Ile Glu Val Cys Pro Gly Thr Met 90

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- Glu Asn Asp Asp Glu Gly Glu Glu Asp Lys Leu Phe Trp Leu Glu Ala 340 345 350
- Cys Tyr Lys Ala Leu Thr Trp His Arg Lys Asn Lys His Val Gln Glu 355 360 365
- Ala Ala Cys Trp Ala Leu Asn Asn Leu Leu Met Tyr Gln Asn Ser Leu 370 375 380
- His Glu Lys Ile Gly Asp Glu Asp Gly His Phe Pro Ala His Arg Glu 385 390 395 400
- Val Met Leu Ser Met Leu Met His Ser Ser Ser Lys Glu Val Phe Gln 405 410 415
- Ala Ser Ala Asn Ala Leu Ser Thr Leu Leu Glu Gln Asn Val Asn Phe 420 425 430
- Arg Lys Ile Leu Leu Ser Lys Gly Ile His Leu Asn Val Leu Glu Leu 435 440 445
- Met Gln Lys His Ile His Ser Pro Glu Val Ala Glu Ser Gly Cys Lys 450 455 460
- Met Leu Asn His Leu Phe Glu Gly Ser Asn Thr Ser Leu Asp Ile Met 465 470 480
- Ala Ala Val Val Pro Lys Ile Leu Thr Val Met Lys Arg His Glu Thr 485 490 495
- Ser Leu Pro Val Gln Leu Glu Ala Leu Arg Ala Ile Leu His Phe Ile 500 505 510
- Val Pro Gly Met Pro Glu Glu Ser Arg Glu Asp Thr Glu Phe His His 515 520 525
- Lys Leu Asn Met Val Lys Lys Gln Cys Phe Lys Asn Asp Ile His Lys 530 535 540

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Lys Cys Gly Leu Lys Val Ile Ser Ser Ile Val His Phe Pro Asp Ala 565 570 575

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Leu Gln Met Tyr Pro Asp Asp Gln Glu Ile Gln Cys Leu Gly Leu Ser
595 600 605

Leu Ile Gly Tyr Leu Ile Thr Lys Lys Asn Val Phe Ile Gly Thr Gly 610 620

His Leu Leu Ala Lys Ile Leu Val Ser Ser Leu Tyr Arg Phe Lys Asp 625 630 635 640

Val Ala Glu Ile Gln Thr Lys Gly Phe Gln Thr Ile Leu Ala Ile Leu 645 650 655

Lys Leu Ser Ala Ser Phe Ser Lys Leu Leu Val His His Ser Phe Asp 660 665 670

Leu Val Ile Phe His Gln Met Ser Ser Asn Ile Met Glu Gln Lys Asp
675 680 685

Gln Gln Phe Leu Asn Leu Cys Cys Lys Cys Phe Ala Lys Val Ala Met 690 695 700

Asp Asp Tyr Leu Lys Asn Val Met Leu Glu Arg Ala Cys Asp Gln Asn 705 710 715 720

Asn Ser Ile Met Val Glu Cys Leu Leu Leu Gly Ala Asp Ala Asn 725 730 735

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Ser Ser Pro Lys Leu Val Glu Leu Leu Leu Asn Ser Gly Ser Arg Glu
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Gln Ile Ile Ser Leu Leu Leu Arg Arg Leu Ala Leu Asp Val Ala Asn Asn Ser Ile Cys Leu Gly Gly Phe Cys Ile Gly Lys Val Glu Pro Ser Trp Leu Gly Pro Leu Phe Pro Asp Lys Thr Ser Asn Leu Arg Lys Gln Thr Asn Ile Ala Ser Thr Leu Ala Arg Met Val Ile Arg Tyr Gln Met Lys Ser Ala Val Glu Glu Gly Thr Ala Ser Gly Ser Asp Gly Asn Phe Ser Glu Asp Val Leu Ser Lys Phe Asp Glu Trp Thr Phe Ile Pro Asp Ser Ser Met Asp Ser Val Phe Ala Gln Ser Asp Asp Leu Asp Ser Glu Gly Ser Glu Gly Ser Phe Leu Val Lys Lys Lys Ser Asn Ser Ile Ser Val Gly Glu Phe Tyr Arg Asp Ala Val Leu Gln Arg Cys Ser Pro Asn Leu Gln Arg His Ser Asn Ser Leu Gly Pro Ile Phe Asp His Glu Asp Leu Leu Lys Arg Lys Arg Lys Ile Leu Ser Ser Asp Asp Ser Leu Arg Ser Ser Lys Leu Gln Ser His Met Arg His Ser Asp Ser Ile Ser Ser Leu Ala Ser Glu Arg Glu Tyr Ile Thr Ser Leu Asp Leu Ser Ala Asn 

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Thr Leu Lys Gln Phe Asn Leu Ser Tyr Asn Gln Leu Ser Phe Val 1085 1090 1095

Pro Glu Asn Leu Thr Asp Val Val Glu Lys Leu Glu Gln Leu Ile 1100 1105 1110

Leu Glu Gly Asn Lys Ile Ser Gly Ile Cys Ser Pro Leu Arg Leu 1115 1120 1125

Lys Glu Leu Lys Ile Leu Asn Leu Ser Lys Asn His Ile Ser Ser 1130 1135 1140

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Ser Ala Arg Met Asn Phe Leu Ala Ala Met Pro Phe Leu Pro Pro 1160 1165 1170

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Lys Leu His Leu Ser His Asn Lys Leu Lys Glu Ile Pro Pro Glu 1250 1260

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Leu Glu Leu Arg Ser Phe Pro Asn Glu Met Gly Lys Leu Ser Lys 1280 1285 1290

Ile Trp Asp Leu Pro Leu Asp Glu Leu His Leu Asn Phe Asp Phe 1295 1300 1305

Lys His Ile Gly Cys Lys Ala Lys Asp Ile Ile Arg Phe Leu Gln 1310 1315 1320

Gln Arg Leu Lys Lys Ala Val Pro Tyr Asn Arg Met Lys Leu Met 1325 1330 1335

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Leu Met Lys Thr Lys Lys Ser Asp Leu Gly Met Gln Ser Ala Thr 1355 1360 1365

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Arg Lys Arg Asp Leu Val Leu Asn Val Trp Asp Phe Ala Gly Arg 1385 1390 1395

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Val Gly Gln Leu Ile Pro Asp Cys Tyr Val Glu Leu Glu Lys Ile 1520 1525 1530

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Ser Gly Val Leu Leu His Phe Gln Asp Pro Ala Leu Gln Leu Ser 1580 1585 1590

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Gln Ile Leu Thr Val Lys Val Glu Gly Cys Pro Lys His Pro Lys 1610 1615 1620

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Arg Lys Phe Pro Lys Asn Tyr Met Ser Gln Tyr Phe Lys Leu Leu

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His	Cys 1685	Glu	Asn	Ser	Glu	Ile 1690	Ile	Ile	Arg	Leu	Туг 1695	Glu	Met	Pro
Tyr	Phe 1700	Pro	Met	Gly	Phe	Trp 1705	Ser	Arg	Leu	Ile	Asn 1710	Arg	Leu	Leu
Glu	Ile 1715		Pro	Tyr	Met	Leu 1720		Gly	Arg	Glu	Arg 1725	Ala	Leu	Arg
Pro	Asn 1730	_	Met	Tyr	Trp	Arg 1735	Gln	Gly	Ile	Tyr	Leu 1740	Asn	Trp	Ser
Pro	Glu 1745	Ala	Tyr	Cys	Leu	Val 1750	Gly	Ser	Glu	Val	Leu 1755	Asp	Asn	His
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Gly	Glu 1820	Glu	His	Gln	Lys	Ile 1825	Leu	Leu	Asp	Asp	Leu 1830	Met	Lys	Lys
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- Gln Ala Pro Glu Phe Leu Leu Gly Asp Gly Ser Phe Gly Ser Val 1880 1885 1890
- Tyr Arg Ala Ala Tyr Glu Gly Glu Glu Val Ala Val Lys Ile Phe 1895 1900 1905
- Asn Lys His Thr Ser Leu Arg Leu Leu Arg Gln Glu Leu Val Val 1910 1920
- Leu Cys His Leu His His Pro Ser Leu Ile Ser Leu Leu Ala Ala 1925 1930 1935
- Gly Ile Arg Pro Arg Met Leu Val Met Glu Leu Ala Ser Lys Gly 1940 1945 1950
- Ser Leu Asp Arg Leu Leu Gln Gln Asp Lys Ala Ser Leu Thr Arg 1955 1960 1965
- Thr Leu Gln His Arg Ile Ala Leu His Val Ala Asp Gly Leu Arg 1970 1975 1980
- Tyr Leu His Ser Ala Met Ile Ile Tyr Arg Asp Leu Lys Pro His 1985 1990 1995
- Asn Val Leu Leu Phe Thr Leu Tyr Pro Asn Ala Ala Ile Ile Ala 2000 2005 2010
- Lys Ile Ala Asp Tyr Xaa Ile Ala Gln Tyr Cys Cys Arg Met Gly 2015 2020 2025
- Ile Lys Thr Ser Glu Gly Thr Pro Gly Phe Arg Ala Pro Glu Val 2030 2035 2040
- Ala Arg Gly Asn Val Ile Tyr Asn Gln Gln Ala Asp Val Tyr Ser 2045 2050 2055
- Phe Gly Leu Leu Tyr Asp Ile Leu Thr Thr Gly Gly Arg Ile 2060 2065 2070

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- Pro Gln Glu Arg Pro Thr Ser Ala Gln Val Phe Asp Ile Leu Asn 2120 2125 2130
- Ser Ala Glu Leu Val Cys Leu Thr Arg Arg Ile Leu Leu Pro Lys 2135 2140 2145
- Asn Val Ile Val Glu Cys Met Val Ala Thr His His Asn Ser Arg 2150 2155 2160
- Asn Ala Ser Ile Trp Leu Gly Cys Gly His Thr Asp Arg Gly Gln 2165 2170 2175
- Leu Ser Phe Leu Asp Leu Asn Thr Glu Gly Tyr Thr Ser Glu Glu 2180 2185 2190
- Val Ala Asp Ser Arg Ile Leu Cys Leu Ala Leu Val His Leu Pro 2195 2200 2205
- Val Glu Lys Glu Ser Trp Ile Val Ser Gly Thr Gln Ser Gly Thr 2210 2215 2220
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- Ser Lys Gln Ser Lys Gln Lys Asn Phe Leu Leu Val Gly Thr Ala 2255 2260 2265
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- Leu Gln Lys Asn Thr Ala Leu Trp Ile Gly Thr Gly Gly His 2420 2425 2430
- Ile Leu Leu Leu Asp Leu Ser Thr Arg Arg Leu Ile Arg Val Ile 2435 2440 2445
- Tyr Asn Phe Cys Asn Ser Val Arg Val Met Met Thr Ala Gln Leu 2450 2455 2460
- Gly Ser Leu Lys Asn Val Met Leu Val Leu Gly Tyr Asn Arg Lys 2465 2470 2475
- Asn Thr Glu Gly Thr Gln Lys Gln Lys Glu Ile Gln Ser Cys Leu 2480 2485 2490
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